

Sub BART 17
ABSTRACT

POWERED RECIPROCATING SAW AND CLAMPING MECHANISM

5 The invention relates to a powered reciprocating saw, in particular to a pruning saw. To simplify use of the saw a clamping mechanism is provided which holds an object in position while it is sawn. The clamping mechanism is mounted at the front portion 4 of the housing of the saw near the saw blade 20. The clamping mechanism comprises: a slide element 30 for sliding movement in cutting direction C of the saw blade, a supporting member 30; and a clamping arm 40 being rotatably mounted on the slide element 30, by means of a one way rotary clutch 42 such that the arm can freely rotate in one direction only, in which direction the clamping arm 40 moves towards the support member 30 to clamp an object therebetween in a clamping position below the saw blade for sawing it. When the saw is in use, it vibrates due to its reciprocating parts. Since the clamping arm 40 has a moment of inertia with respect to this axis of rotation of the one way rotary clutch 42, the oscillating movement is transformed into a stepwise, progressive rotational movement of the clamping arm which thereby closes automatically to clamp an object to be sawn.

Figure 1.